

Appendix D: Utility energy efficiency programs

Avista Utilities had a rider on their natural gas tariff for energy efficiency in 1995 and 1996, but this was discontinued when costs for natural gas declined and avoided costs were too low to support a cost effective program. Due to rising natural gas costs and customer demand, the tariff rider was reinstituted in February 2001. In 2002, Avista achieved 273 percent of their goal for natural gas efficiency and in 2003 they have reached over 500,000 therms of savings in the first seven months, more than twice their goal of 240,000 therms. In 2002, Avista provided almost \$1.3 million in incentives for natural gas efficiency measures. About 30 percent of the incentives went to limited income customers (384 customers), 27 percent to residential (2,783 customers), 24 percent to health care organizations, and the remainder to other commercial customers (45 total commercial customers including health care). Building shell improvement (mostly limited income and residential customers) accounted for 54 percent of the incentives, heating ventilation air conditioning (HVAC), mostly health care and residential customers, accounted for 42 percent, and most of the rest went to appliances (domestic hot water savings). Savings was estimated at 653,983 therms at a levelized cost of 23.7 cents/therm. HVAC measures account for 46 percent of the savings, shell 40 percent, and appliances 7 percent. The rest is industrial process and resource management savings. To respond to this increased demand, Avista is almost doubling its tariff rider to cover program costs.

Avista's commercial/industrial energy efficiency program is a flexible "come one, come all" approach that uses a simple formula that can be applied to any energy efficiency measure. An incentive in cents/therm is paid for each therm saved. The incentive rate is based upon the simple payback of the measure prior to the application of an incentive, as calculated by company staff and based upon standardized measure costs. Simple payback is defined as the capital cost of the project divided by the energy savings per year. All incentives were capped at 50 percent of total project cost as determined by the company based upon industry standards. This cap has been reduced to 30 percent to reduce program costs.

For residential households, Avista provides rebates for high efficiency natural gas furnaces, boilers, and water heaters, programmable thermostats, attic, floor, wall and duct insulation, and electric to natural gas space and water heat conversions.

Puget Sound Energy (PSE) ramped up its natural gas efficiency efforts in response to a rate case settlement in mid-2002, which committed them to 2.1 million therms of natural gas savings through 2003, which they have achieved. For 2004 and 2005, PSE's target is more than 5 million therms of natural gas savings at a cost of \$9.1 million. This target was determined by a detailed integrated resource planning process where PSE considered the costs of acquiring energy efficiency resources compared to the cost of acquiring natural gas. For comparison, PSE is spending \$52.8 million to acquire a little more than twice as much electricity energy efficiency resources. The difference is due both to the higher cost of electricity and

the fact that PSE needs to acquire electricity resources, while in the near term it has excess natural gas capacity.

The analysis of cost-effective, achievable natural gas energy efficiency resources for PSE shows that two-thirds of the savings is in the residential sector. Most of this is for space heating efficiency improvements in existing homes. In the commercial sector, most of the savings is for HVAC and water heating efficiency improvements.

Cascade Natural Gas began providing rebates for residential energy efficient space and water heating equipment in Fall 2002. Annual program expenditures were expected to be around \$813,000 with annual energy savings of 340,000 therms.

Northwest Natural Gas began implementing energy efficiency programs in Washington in 2001. Annual program expenditures were expected to be around \$350,000, but in 2002 actual expenditures were \$71,000. Both Cascade and Northwest Natural Gas defer their efficiency program expenditures and recover their costs in their Purchased Gas Adjustment filings.